DRAFT

Permit to Store Hazardous Waste and to Store and Treat Connecticut Regulated Waste

FACT SHEET

May 17, 1994
EPA I.D. No.CTD001164599
DEP/HWM-151-028

I. Name and Address of Permit Applicant:

MacDermid, Incorporated
526 Huntingdon Avenue
Waterbury, CT 06708

II. Facility Type:

MacDermid, Incorporated has submitted applications for permits to:

1.) Store hazardous wastes for greater than 90 days in tanks and containers (RCRA hazardous waste permit).

2.) Store in containers and treat (recycle) in tanks Connecticut regulated wastes (State 22a-454 permit).

III. Description of Facility and Wastes Managed:

The principal business of MacDermid, Incorporated is the blending or compounding of chemical products used in the metal finishing, plating on plastics, electronics, microelectronics and surface treatment industries.

The facility manages hazardous and 22a-454 wastes generated from its chemical product manufacturing processes, received from customers, and received from other MacDermid facilities. Customer's wastes are regenerated and resold to customers for reuse, with some residues and other, non-recyclable wastes being stored prior to being transported to a permitted waste treatment facility. Wastes generated from chemical production and received from other MacDermid facilities are stored pending recycling or disposal off-site at a permitted treatment facility. The process by which the wastes are recycled is exempt under the federal recycle/reclaim provisions, and does not fall under the scope of the RCRA permit; however, because the process is used to recycle 22a-454 wastes as well as hazardous wastes, it is not exempt from the State 22a-454 permit requirements, and will be addressed by the state 22a-454 permit.

The hazardous and 22a-454 wastes handled include:

A. Used Surface Finishing Chemicals Received from Customers or off-site MacDermid facilities for Recycling:

1. Copper Etchant (D002/D004/D007/D008)
2. Solder Conditioner (D002/D008)
3. Solder Stripper (D001/D002/D008)

B. Wastes Generated On-site from Chemical Product Manufacturing:

1. Copper Etchant (D002/D004/D007/D008)
2. Solder Conditioner (D002/D008)
3. Solder Stripper (D001/D002/D008)
4. Acid Zinc Solution (CR04, D002)
5. Acid Copper Solution (CR04, D002)
6. Methanol (U154)
7. Acetone (U002)
8. Chelated Waste Cleaner (D002)
9. Stanous Sulfide Solution (D002)
10. Waste Mixed Solvents (Non-chlorinated) (D001/D002/F003/F005)
11. Waste Mixed Solvents (Chlorinated) (D001/D002/F002)
12. Metal Hydroxide/Sulfide Sludge (F006)
13. Waste Nickel Solution (CR04, D002)
14. Lead Fluoride Sludge (D008)
15. Cadmium Plating Solution (D002/D006)
16. Vacuum Pump Oil/ Inks (CR02, D001)
17. Laboratory Apparatus Mercury (D009)
18. Electroless Copper (CR04)

C. Wastes received from MacDermid's 245 Freight Street Facility:

1. Stanous Sulfide Solution (D002)
2. Chelated Waste Cleaner (D002)
3. Palladium Solution (CR04, D002)
4. Waste Nickel Solution (CR04, D002)
5. Acid Zinc Solution (CR04, D002)
6. Cadmium Plating Solution (D002/D006)
7. Acid Copper Solution (CR04, D002)
8. Waste Mixed Solvents (Non-chlorinated) (D001/D002/F003/F005)
9. Waste Mixed Solvents (Chlorinated) (D001/D002/F002)
10. Laboratory Apparatus Mercury (D009)

D. Wastes are stored in six different areas at the facility. The six areas and their respective capacities are:

1. Main Container Storage Area:
   - o maximum of 20-330 gallon storage totes.
   - o rack storage on palates of a maximum of 1,400-55 gallon drums.
   - o total storage capacity is 77,000 gallons.
2. Quality Control (QC) Area (Waste Staging Area):
   - o maximum of 6-330 gallon storage totes.
   - o maximum of 80-55 gallon drums.
   - o total storage capacity is 6,380 gallons.
3. Flammable Material Storage Area:
   - o maximum of 16-55 gallon drums.
   - o total storage capacity is 880 gallons.

4. Combustible Storage Area:

   - o maximum of 4-330 gallon storage totes.
   - o maximum of 54-55 gallon drums.
   - o total storage capacity is 4,290 gallons.

5. Metal Hydroxide/Sulfide Sludge Storage Area:

   - o maximum of 1-26 cubic yard roll-off container.

6. Waste Storage Tanks:

   - o 3-8,000 gallon and 1-5,000 gallon fiberglass storage tanks. Total storage capacity is 29,000 gallons.

E. Wastes are treated and recycled in a total of 8 tanks.

- o 1-3,000 gallon polyethylene tank; 2-1,000 gallon polyethylene tanks; 2-1,500 gallon polyethylene tanks; 1-3,800 stainless steel tanks; and 2-5,000 stainless steel tanks. Total capacity is 21,800 gallons.

IV. Permit Basis:

The conditions of the permits are based upon the Regulations of the Connecticut State Agencies adopted pursuant to Section 22a-449(c) of the Connecticut General Statutes, and upon the provisions of Section 22a-6 and 22a-454 of the Connecticut General Statutes. The Connecticut Hazardous Waste Management Regulations, have incorporated by reference the Federal (RCRA) Hazardous Waste Regulations. The Federal regulations referenced include the technical and administrative standards for hazardous waste facilities in 40 CFR Parts 264 and 270.

V. Variances or Alternatives to Required Standards:

A. Wastes which are specifically prohibited from being managed at the facility.

Section II of the Hazardous Waste Permit lists specific prohibitions that apply to wastes being managed at the facility. These prohibitions are based on:

1. The National Fire Protection Association (NFPA) hazardous materials classifications described in NFPA 704, NFPA 325M, and NFPA 49. These hazard classifications rank the degree of hazard under each of the following categories: Health, Flammability, and Reactivity. The degree of hazard rankings range form 0 to 4, with the higher value indicating the more hazardous materials.

2. The NFPA classification described in NFPA 43A. These hazard classifications are ranked by class, which range from 1 to 4, with the higher value indicating the more hazardous materials.

3. The NFPA classifications described in NFPA 43B. These hazard classifications are ranked by class, which range from I to V, with the lower value (numeral) indicating the more hazardous materials.

4. The NFPA classifications described in NFPA 43C. These hazard classifications are described and ranked as defined in NFPA 704, NFPA 325M, and NFPA 49.

In determining which prohibitions to apply, the DEP considered whether the permit application adequately demonstrated the facility's ability to properly manage hazardous wastes and other materials for each of the NFPA hazard classifications and whether compliance with applicable NFPA standards for such storage was demonstrated.

MacDermid, Inc. is prohibited form storing wastes as noted below:

a) Compressed gasses and cryogenic materials, as defined in 49 CFR 173.300(a) and (f) respectively. Materials that are pyrophoric, defined as any material that ignites spontaneously.

   Rationale: MacDermid, Inc. does not manage these materials and as such has not identified these materials, the containers utilized for these materials, and has not shown that during normal operations the management practices for these materials are protective of human health and the environment.

b) Shock sensitive materials, defined as materials that are readily capable of detonation or of explosive decomposition or explosive reaction at normal temperature and pressure and materials that are sensitive to mechanical or localized thermal shock at normal temperatures and pressures, including materials designed by NFPA 704 as having a Reactivity Hazard rating of 4 (see NFPA 704, 1990 edition).

Rationale: MacDermid, Inc. does not manage these materials and as such has not shown that these materials are being stored in detached storage areas as required by the NFPA Standard 704, and has not shown that these materials are managed in a manner which is protective of human health and the environment.

c) Explosive materials, as defined in 49 CFR 173 Subpart C.

Rationale: MacDermid, Inc. does not manage these materials and as such has not shown that these materials are managed in a manner which is protective of human health and the environment.

d) Materials that have a Health Hazard rating of 4 as defined in NFPA 704, 1990 edition.

Rationale: MacDermid, Inc. does not manage these materials and as such has not shown that during normal operations, the level of personnel protection and management protocols are adequate for the handling of these materials, and that under emergency conditions, the contingency plan adequately addresses how the company will implement this plan to mitigate situations involving these materials.

e) Special Hazards: (These limitations apply per area, where applicable)
   i) Liquid and Solid Oxidizing Materials, as defined in NFPA 43A:
      Class 2 oxidizers in excess of 1,000 pounds,
      Class 3 oxidizers in excess of 200 pounds,
      Class 4 oxidizers in excess of 10 pounds,
   ii) Organic Peroxide Formulations, as defined in 43B;
      Class I organic peroxides,
      Class II organic peroxides,
      Class III organic peroxides in excess of 1,500 pounds,
      Class IV organic peroxides in excess of 100,000 pounds.
   iii) Gaseous Oxidizers, as defined in NFPA 43C.

Rationale: Restrictions have been placed on the storage of wastes that are identified as liquid and solid oxidizers, organic peroxide formulations, and gaseous oxidizers above, because MacDermid, Inc. does not manage these materials in excess of the above noted limitations and as such has not demonstrated compliance with applicable NFPA standards.

VI. Additional Information:

Materials available for inspection with respect to this permit include:

1. The hazardous and State 22a-454 permit application.

2. Draft Hazardous waste facility permit.

3. Draft State 22a-454 permit.

4. Public Notice for the draft facility permits.

5. Administrative record of the permit application review, approval, and permit-writing processes.

Items 2, 3, and 4 are available at the following location anytime between 8:30 a. . and 4:30 p.m., Monday through Friday, excluding state and/or federal holidays:

Ms. Patricia M. Mulhall, Town Clerk
City Hall
235 Grand Street
Waterbury, CT 06702
Telephone: (203) 574-6806

Items 1 through 5 are available for inspection at the DEP offices in Hartford anytime between 8:30 a.m. and 4:00 p.m. Monday through Friday, excluding state and/or federal holidays by contacting:

John M. Berg, Sanitary Engineer:
(203) 566-4869
Department of Environmental Protection
Waste Management Bureau
Waste Engineering and Enforcement Division
79 Elm Street, Fourth Floor
Hartford, CT 06106-5127
Telephone: (203) 566-4869

Interested persons may obtain copies of the application from Cherrie Gillis, Manager/Regulatory Affairs, MacDermid, Inc. (203) 575-5700. All interested persons are invited to express their views on the tentative determination concerning the draft permits. Written comments on the draft permits or a request for a hearing shall be submitted no later than June 30, 1994, forty-five (45) days after publication (May 17, 1994) of this notice. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing or the reason for opposition to the draft permits. Comments shall be directed to: John M. Berg, Sanitary Engineer DEP, Bureau of Waste Management, 79 Elm Street, Hartford, CT 06106-5127.